

TYPICAL PROPERTIES TABLE COMPARISON

This document presents the typical properties of both product Promosolv Coat UT10 2% and Novec EGC1700

	Promosolv coat UT10 2%	Novec EGC 1700
<u>Coating Solution</u>		
Appearance	Colorless, clear to slightly cloudy	Clear, colorless to light-colored liquid solution
Solids	2 wt% fluoropolymer	2 wt% fluoropolymer
Specific gravity	1.4	1.5
Boiling point of solvent	61 – 76°C	61°C
Flash point	None	None
Viscosity	~ 1cSt	0.91cP
Surface tension	13.6 mN/m or dynes/cm	-
<u>Fluoropolymer Coating</u>		
Appearance	Clear, colorless	Transparent, colorless
Coating thickness	0.1 – 1.0 microns (depending on application method)	0.1 – 1.0 microns (depending on application method)
Solvent and chemical resistance	Excellent	Yes
T_g (glass transition temperature)	75°C	44.5°C
Thermal stability of dry film	150°C continuous – 250°C one hour	Repellent to chlorinated silicone oil after 24 hours at 175°C
Contact angles	120° (water), 80° (oil)	105° (water), 65° (hexadecane)
Surface energy	5 – 10 dynes/cm	-
Refractive index	~ 1.35	1.39
Shelf life	Two years	Four years from date of manufacture in unopened container
Solder-Through repairability	Yes	Yes
Coefficient of Thermal Expansion -TMA	-	70µm/(m.°C)
Thermal Conductivity	-	0.1W/m*K
Nonflammability	UL 94 V-0 approved	Meets UL 94 V-0
Dielectric constant	2.25 (@100kHz)	3.2 (@1kHz) @30% RH
Dissipation factor	0.016 (@100KHz)	0.002 (@1kHz) @30% RH
Dielectric breakdown strength	2500V/mil	2000V/mil 30% RH @20°C (ASTM D149)
Volume resistivity	4.5x10 ¹⁵ Ω.cm	-